PERMIT APPLICATION: NRS #06-053

APPLICANT: The BNSF Railroad Company

Attn: Mr. Ross Thomas 4515 Kansas Avenue Kansas City, KS 66106

(913) 551- 4410

LOCATION: Johns Creek at the BNSF Tennessee Yard in Memphis, Shelby

County. The site is bounded by Shelby Drive to the south, Lamar

Avenue to the west and South Perkins Road to the north.

WATERSHED DESCRIPTION: Surrounding land use is existing railroad yard

and commercial development. Johns Creek is listed on the 303 (d) list for "loss of biological integrity due to siltation from

land development". The stream is impaired; EPA has

approved a fecal coliform TMDL that addresses some of the

known pollutants.

PROJECT DESCRIPTION: The proposed project involves the addition of six intermodal loading tracks and appurtenant truck and equipment lanes and to increase the hydraulic capacity through the area of the BNSF Railway Tennessee Yard in Memphis. In order to accomplish this the applicant proposes to construct 550 linear feet of a three cell arch culvert over Johns Creek upstream of an existing railway bridge. The bottom of the culvert will be recessed in order to establish a natural substrate over the bottom. High flow shelves will be constructed along approximately 400 linear feet of both banks of Johns Creek maintaining the existing low flow channel. Johns Creek will be widened to transition flow into the culvert while maintaining the existing low flow channel. The high flow shelves will be bounded by retaining walls or earthen embankments to support the adjacent parking lots.

Two rows of native trees shall be planted on fifteen (15) foot centers along the low flow channel.

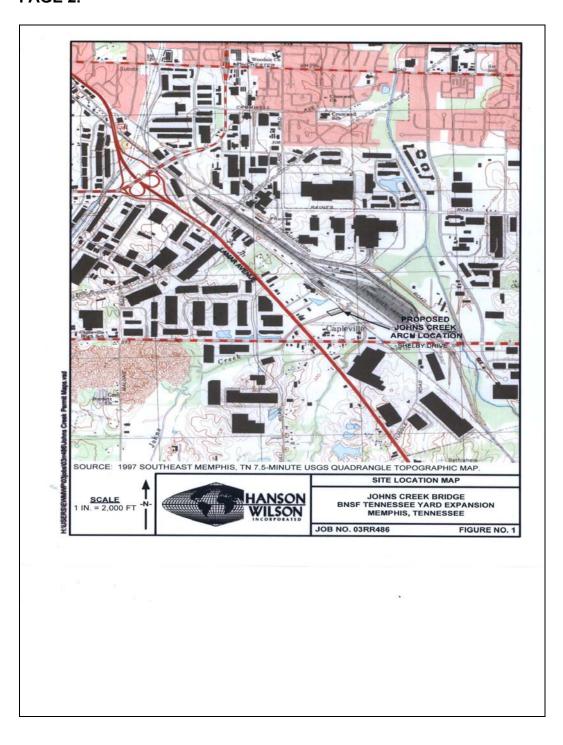
The 550 linear feet of culvert will be mitigated with the payment of \$200.00/ linear feet (\$110,000) to the Tennessee Stream Mitigation Program (TSMP).

PERMIT COORDINATOR: Mike Lee

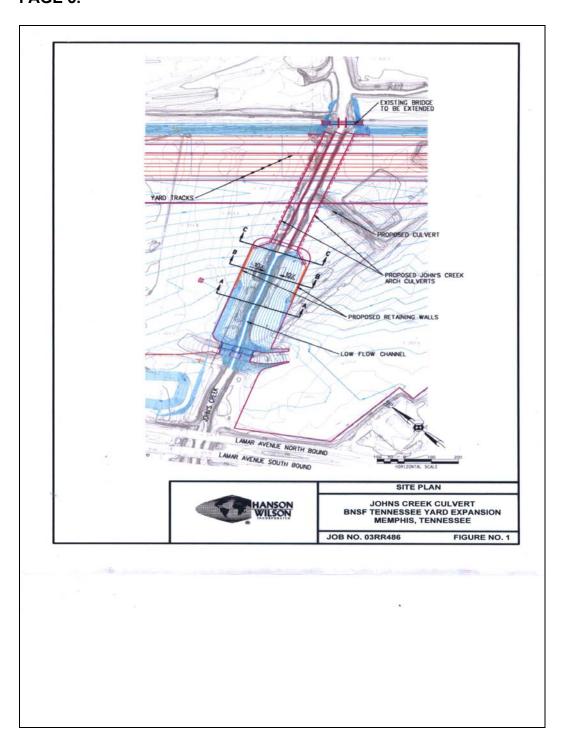
TOPOGRAPHICAL QUADRANGLE: Southeast Memphis 409- SW

35.02451 N -89.89567 W

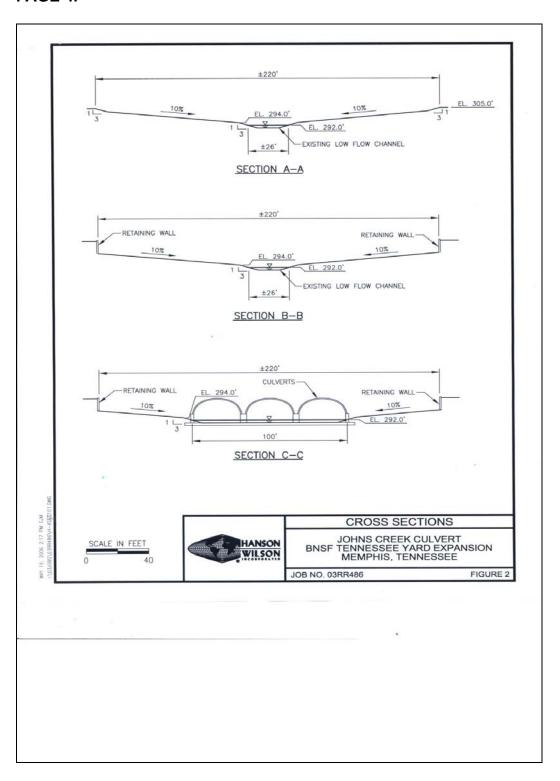
ARAP #06-053 BNSF RAILWAY COMPANY PAGE 2.



ARAP #06-053 BNSF RAILWAY COMPANY PAGE 3.



ARAP #06-053 BNSF RAILWAY COMPANY PAGE 4.



ARAP #06-053 BNSF RAILWAY COMPANY PAGE 5.

